

WHAT IS CLAIMED IS:

1. A noncontact tonometer comprising:

fluid blowing means for blowing fluid onto a cornea to deform the cornea;

measuring-light projecting means for projecting measuring light onto the cornea;

corneal deformation detecting means for detecting the measuring light reflected by the cornea when the cornea is deformed by the fluid so as to have a predetermined curvature radius;

calculating means for calculating intraocular pressure on the basis of the detection by the corneal deformation detecting means;

control means for controlling a measuring operation of the noncontact tonometer;

predetermined intraocular-pressure setting means capable of setting a predetermined intraocular pressure; and

comparing means for comparing the magnitude of the intraocular pressure obtained by the calculating means with the predetermined intraocular pressure,

wherein the control means varies the measuring operation of the noncontact tonometer depending on the comparison by the comparing means.

2. A noncontact tonometer according to Claim 1, wherein the intraocular-pressure setting means is capable of setting at least a first predetermined intraocular pressure and a second predetermined intraocular pressure.

3. A noncontact tonometer according to Claim 2, wherein the comparing means compares whether the intraocular pressure calculated by the calculating means is higher than the first predetermined intraocular pressure and lower than the second predetermined intraocular pressure.

4. A noncontact tonometer according to Claim 1, wherein the control means performs a continuous measuring operation and stops the continuous measuring operation depending on the comparison by the comparing means.

5. A noncontact tonometer according to Claim 1, wherein the control means adds a predetermined number of measurements depending on the comparison by the comparing means;

6. A noncontact tonometer according to Claim 1, wherein the control means comprises notifying means for notifying an operator of the comparison by the comparing means.

7. A noncontact tonometer according to Claim 1, wherein the fluid blowing means comprises fluid control means for controlling the force of the fluid blown onto the cornea for varying the force of the blown fluid depending on the comparison by the comparing means.

8. A noncontact tonometer according to Claim 1, wherein the measuring operation comprises pupil-position sensing means for alignment, corneal bright-point detection means for close alignment, a solenoid for driving, and the corneal deformation means.

9. A noncontact tonometer according to Claim 1, wherein the measuring operation comprises pupil-position sensing means for alignment, corneal bright-point detection means for close alignment, a solenoid for driving, the corneal deformation detection means, and notifying means for notifying the operator of the comparison by the comparing means.

10. A noncontact tonometer comprising:  
a nozzle that blows fluid onto a cornea to deform the cornea;  
a light source that projects measuring light onto the

cornea;

a lens system that detects the measuring light reflected by the cornea when the cornea is deformed by the fluid so as to have a predetermined curvature radius;

a controller that calculates intraocular pressure on the basis of the detection by the lens system; controls a measuring operation of the noncontact tonometer, sets a predetermined intraocular pressure and compares the magnitude of the intraocular pressure with the predetermined intraocular pressure,

wherein the controller varies the measuring operation depending on the comparison of the magnitude of the intraocular pressure with the predetermined intraocular pressure.

11. A noncontact tonometer according to Claim 10, wherein the controller is capable of setting at least a first predetermined intraocular pressure and a second predetermined intraocular pressure.

12. A noncontact tonometer according to Claim 11, wherein the controller compares whether the calculated intraocular pressure is higher than the first predetermined intraocular pressure and lower than the second predetermined intraocular pressure.

13. A noncontact tonometer according to Claim 10, wherein the controller performs a continuous measuring operation and stops the continuous measuring operation depending on the comparison of the magnitude of the intraocular pressure with the predetermined intraocular pressure.

14. A noncontact tonometer according to Claim 10, wherein the controller adds a predetermined number of measurements depending on the comparison of the magnitude of the intraocular pressure with the predetermined intraocular pressure.

15. A noncontact tonometer according to Claim 10, wherein the controller comprises a beeper for notifying an operator of the comparison of the magnitude of the intraocular pressure with the predetermined intraocular pressure.

16. A noncontact tonometer according to Claim 10, wherein the nozzle comprises a fluid controller for controlling the force of the fluid blown onto the cornea for varying the force of the blown fluid depending on the comparison of the controller.